

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : Dual Purpose Kerosene

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : Fuels

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Inver Energy Ltd
River House Blackpool Park
Cork - Ireland
T +353 21 4396950
inver@inverenergy.com

1.4. Emergency telephone number

Emergency number : + 353 21 4396590
09.00-17.00 GMT

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 3 H226
Carc. 2 H351
Asp. Tox. 1 H304
Aquatic Acute 1 H400
Aquatic Chronic 1 H410

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

Carc.Cat.3; R40
Xn; R65
N; R50/53
R10

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS08

GHS09

Signal word (CLP) : Danger

Hazard statements (CLP) : H226 - Flammable liquid and vapour
H304 - May be fatal if swallowed and enters airways
H351 - Suspected of causing cancer
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

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smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical/ventilating/lighting/... equipment

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Kerosine (petroleum), hydrodesulfurized, Kerosine - unspecified, [A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).]	(CAS No) 64742-81-0 (EC no) 265-184-9 (EC index no) 649-423-00-8	>= 95	Xn; R65
Naphthalene	(CAS No) 91-20-3 (EC no) 202-049-5 (EC index no) 601-052-00-2	< 3	Carc.Cat.3; R40 Xn; R22 N; R50/53

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Kerosine (petroleum), hydrodesulfurized, Kerosine - unspecified, [A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).]	(CAS No) 64742-81-0 (EC no) 265-184-9 (EC index no) 649-423-00-8	>= 95	Asp. Tox. 1, H304
Naphthalene	(CAS No) 91-20-3 (EC no) 202-049-5 (EC index no) 601-052-00-2	< 3	Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)

Full text of R- and H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.
- First-aid measures after skin contact : Rinse immediately with plenty of water for 15 minutes. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
- First-aid measures after ingestion : Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. May result in aspiration into the lungs, causing chemical pneumonia. Do NOT induce vomiting. Get immediate medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after ingestion : Caution if victim vomits: Risk of aspiration!.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : carbon dioxide (CO₂), water, dry chemical powder.
- Unsuitable extinguishing media : Do not use water jet.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable liquid.
- Explosion hazard : Vapours can form explosive mixtures with air.
- Hazardous decomposition products in case of fire : Carbon monoxide. Carbon dioxide.

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5.3. Advice for firefighters

- Firefighting instructions : Move undamaged containers from immediate hazard area if it can be done safely. Cool down the containers exposed to heat with a water spray. Prevent fire-fighting water from entering environment.
- Protective equipment for firefighters : In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : In case of fire: Wear self-contained breathing apparatus.
- Emergency procedures : Evacuate and limit access. Use care in walking on spilled material. Spilled material may present a slipping hazard. Ensure adequate ventilation.

6.1.2. For emergency responders

- Protective equipment : In case of fire: Wear self-contained breathing apparatus.
- Emergency procedures : Evacuate and limit access. Spilled material may present a slipping hazard. Use care in walking on spilled material. Eliminate all ignition sources if safe to do so. Provide adequate ventilation.

6.2. Environmental precautions

Do not allow run-off from fire-fighting to enter drains or water courses. Relevant water authorities should be notified of any large spillage to water course or drain. Do not discharge into drains or the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Stop leak if safe to do so. Ventilate affected area. Prevent entry to sewers and public waters.
- Methods for cleaning up : For small spills: dilute with small amount of water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Use only antistatically equipped (spark-free) tools. Dispose of waste according to applicable legislation. move container from spill area . Ensure all waste water is collected and treated via a waste water treatment plant. Large spills: Contain and/or absorb spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Risk of explosive mixtures of vapour in air. Handle empty containers with care because residual vapours are flammable.
- Precautions for safe handling : Use only in well-ventilated areas. In case of insufficient ventilation, wear suitable respiratory equipment. Containers remain hazardous when empty. Continue to observe all precautions. Ground/bond container and receiving equipment. Avoid contact with skin, eyes and clothes. Open and handle container with care. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to flames, sparks, heat, or other potential ignition sources.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wash contaminated clothing prior to re-use. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Use only antistatically equipped (spark-free) tools.
- Storage conditions : Keep container tightly closed. Store in dry, cool, well-ventilated area. Protect against direct sunlight.
- Heat and ignition sources : Remove all sources of ignition. Store away from excessive heat.
- Storage area : Store in a well-ventilated place. Containers which are opened should be properly resealed and kept upright to prevent leakage. Store according to local legislation. Limit access only to the necessary cleaning personnel.
- Special rules on packaging : Correctly labelled.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Kerosine (petroleum), hydrodesulfurized, Kerosine - unspecified, [A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).] (64742-81-0)

Belgium	Limit value (mg/m ³)	200 mg/m ³
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Belgium

Remark*

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Naphthalene (91-20-3)

USA - ACGIH	ACGIH TWA (ppm)	10 ppm
USA - NIOSH	NIOSH REL (TWA) (mg/m ³)	50 mg/m ³
USA - NIOSH	NIOSH REL (TWA) (ppm)	10 ppm
USA - NIOSH	NIOSH REL (STEL) (mg/m ³)	75 mg/m ³
USA - NIOSH	NIOSH REL (STEL) (ppm)	15 ppm
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	50 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	10 ppm
USA - OSHA	OSHA PEL (STEL) (mg/m ³)	75 mg/m ³
USA - OSHA	OSHA PEL (STEL) (ppm)	15 ppm

8.2. Exposure controls

Appropriate engineering controls

: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits.

Personal protective equipment

: In case of splash hazard: safety glasses. Face shield. Protective clothing.



Hand protection

: Wear suitable gloves tested to EN374. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Eye protection

: Use safety glasses with side-shields or goggles. DIN EN 166.

Respiratory protection

: An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Clear to light amber. Yellow.
odour	: Petroleum hydrocarbon odour.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 140 - 300 °C
Flash point	: > 38 °C Closed Cup (Pensky-Martens)
Auto-ignition temperature	: 240 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: < 0,013 kPa 20°C
Relative vapour density at 20 °C	: > 5 (Air = 1)
Relative density	: 0,78 - 0,82 g/cm ³ 15°C
Solubility	: Slightly soluble in: Water.
Log Pow	: No data available
Viscosity, kinematic	: 0,01 - 0,02 cSt
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

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Explosive limits : 1 - 6 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to flames, sparks, heat, or other potential ignition sources.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Stable under normal conditions of use.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Kerosine (petroleum), hydrodesulfurized, Kerosine - unspecified, [A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).] (64742-81-0)

LC50 inhalation rat (mg/l)	> 5200 mg/m ³ 4 hours
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Naphthalene (91-20-3)

LD50 oral rat	> 490 mg/kg
LD50 dermal rat	> mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 0,4 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer.
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

Naphthalene (91-20-3)

LC50 fishes 1	0,213 mg/l 96h - <i>Melanotaenia fluviatilis</i>
EC50 Daphnia 1	1,6 mg/l
LC50 other aquatic organisms 2	0,235 mg/l 48h - Crustaceans <i>Palaemonetes pugio</i>
NOEC (chronic)	0,6 mg/l Fresh water

12.2. Persistence and degradability

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Persistence and degradability	Readily biodegradable in water.
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12.3. Bioaccumulative potential

No additional information available

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12.4. Mobility in soil

Dual Purpose Kerosene

Ecology - soil	Product is easily volatile. Adsorbs into the soil.
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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Dispose of this material and its container to hazardous or special waste collection point.
Waste treatment methods	: Recycling the product is recommended. If recycling is not possible, suitable routes of disposal are supervised incineration with energy recovery according to the characteristic of material at the time of disposal and based on local legislation.
Waste disposal recommendations	: Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No.	: 1863
UN-No.(IATA)	: 1863
UN-No. (IMDG)	: 1863
UN-No.(ADN)	: 1863

14.2. UN proper shipping name

Proper Shipping Name	: FUEL, AVIATION, TURBINE ENGINE
Transport document description	: UN 1863 FUEL, AVIATION, TURBINE ENGINE, 3, III, (D/E)

14.3. Transport hazard class(es)

Class (UN)	: 3
Classification code (UN)	: F1
Class (IATA)	: 3
Class (IMDG)	: 3
Class (ADN)	: 3
Hazard labels (UN)	: 3



14.4. Packing group

Packing group (UN)	: III
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14.5. Environmental hazards

Dangerous for the environment	: Yes
Marine pollutant	: Yes



Other information	: No supplementary information available.
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14.6. Special precautions for user

14.6.1. Overland transport

Transport regulations (ADR)	: Subject to the provisions
Hazard identification number (Kemler No.)	: 30
Classification code (UN)	: F1

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Orange plates



Special provision (ADR) : 363

Transport category (ADR) : 3

Tunnel restriction code : D/E

Limited quantities (ADR) : 5L

Excepted quantities (ADR) : E1

EAC code : 3YE

14.6.2. Transport by sea

Transport regulations (IMDG) : Subject to the provisions

14.6.3. Air transport

Transport regulations (IATA) : Subject to the provisions

14.6.4. Inland waterway transport

No additional information available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains no REACH candidate substance

Seveso Information :

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Other information : It is the user's responsibility to take the mentioned precautionary measures and to ensure that this information is complete and sufficient for the use of this product. This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
Flam. Liq. 3	flammable liquids Category 3
H226	Flammable liquid and vapour
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R22	Harmful if swallowed
R40	Limited evidence of a carcinogenic effect
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R65	Harmful: may cause lung damage if swallowed
N	Dangerous for the environment

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Xn	Harmful
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SDS EU (REACH Annex II)

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